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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,767	09/14/2001	Ruediger Musch	Mo-6587 LeA 34,663	8537

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EXAMINER

LEE, RIP A

ART UNIT PAPER NUMBER

1713

DATE MAILED: 10/30/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,767

Applicant(s)

MUSCH ET AL.

Examiner

Rip A. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 1, 2, 5, 8, 13-17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action follows a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), filed in this application after final rejection on August 13, 2003. Applicants have amended claim 1. New claims 7-20 were added.

Claim Objections

1. Claims 1 and 5 are objected to because of the following informalities: The plural, "acids" should be used since claims are drawn to other (*i.e.*, more than one) diterpenecarboxylic acid. If use of only one acid is claimed, revision using "another" is recommended. Appropriate correction is required.
2. Claims 2, 8, and 13 are objected to because of the following informalities: Since there are only two members in the Markush group, the claim may succinctly recite, "1 to 10 parts of zinc oxide or magnesium oxide," and convey the same meaning. Appropriate correction is required.
3. Claims 14 and 16 are objected to because of the following informalities: Please rewrite the claim such that use of two consecutive prepositions, "at from," is avoided. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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7. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 4,212,780 to Fitzgerald.

Fitzgerald discloses an adhesive composition comprising 100 parts (by weight) of chloroprene polymer, 4-6 parts of unmodified rosin, 1-50 parts of basic metal oxide, 5-100 parts of modified phenolic resin (claims 1 and 2). According to the inventors, the term chloroprene polymer encompasses polymers containing comonomers such as 2,3-dichloro-1,3-butadiene such that the amount of comonomer is less than 25 mole % (col. 3, lines 49-59). The metal oxide is MgO (claim 6). Table I shows use of Nancy Wood rosin as emulsifier for the chloroprene polymer. This material is comprised of a mixture of 44.8 wt % of abietic acid, 3.8 wt % of neoabietic acid, 3.6 wt % of levopimaric acid, and 15.4 wt % of dehydroabietic acid, *inter alia*. Each of these diterpenecarboxylic acids contains at least two conjugated double bonds. Therefore, the subject matter of the independent claims is fully anticipated by the prior art of Fitzgerald.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzgerald. The reference is silent with respect to the open time of the adhesive compositions therein. Since the prior art composition is essentially the same as that presently claimed, a reasonable basis exists to believe that such an adhesive also possesses the claimed open time. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

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8. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,872,043 to Branlard *et al.* in view of Fitzgerald.

Branlard *et al.* discloses an emulsifying system comprising resinic acid for chloroprene dispersions (col. 3, lines 39-42). Resinic acid describes an acid from natural acidic resins such as non-modified rosin, which contains abietic acid (col. 2, line 65; claim 1). Fitzgerald shows that unmodified rosins such as Nancy Wood rosin contains at least 40 wt % of abietic acid as well as other diterpenecarboxylic acids which contain at least two conjugated double bonds. One having ordinary skill in the art would have found it obvious to use unmodified rosin because Branlard *et al.* prescribes it specifically. Then, the skilled artisan, turning to Fitzgerald to determine what an 'unmodified resin' constitutes, would have found it obvious to use the unmodified rosins disclosed therein, and he would have expected such materials to work successfully as emulsifying agent for chloroprene dispersions. Although Branlard *et al.* fails to explain that polychloroprenes may include copolymers of chloroprene with other ethylenically unsaturated monomers, the skilled artisan would have found it obvious to use comonomers such as 2,3-dichloro-1,3-butadiene, *as per* Fitzgerald, because this is shown as a useful copolymer for polychloroprene-based adhesive compositions. Absent any untoward teaching in Branlard *et al.*, the skilled artisan would have expected use of such a copolymer to work.

Finally, Branlard *et al.* teaches an adhesive formulation comprised of 100 parts (by weight) of the polychloroprene rubber, 5 parts of ZnO, 8 parts MgO, and 40 parts of phenolic resin (col. 7). The skilled artisan would have found it obvious to make an adhesive using chloroprene copolymer, ZnO, MgO, and phenolic resin in the corresponding amounts because this is exemplified in the prior art.

The prior art is silent with respect to the open time of the adhesive compositions therein. Since the prior art adhesive would contain essentially the same composition as that presently claimed, a reasonable basis exists to believe that such an adhesive also possesses the claimed open time. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

9. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branlard *et al.* in view of U.S. Patent No. 3,926,880 to Esser *et al.*

The discussion of the disclosures of the prior art of Branlard *et al.* from the previous paragraph of this office action is incorporated here by reference. The inventors claim use of phenolic resin is used as a modifying resin for the polychloroprene adhesive, but there is no indication as to what phenolic resin is used. Esser *et al.* shows that terpenephenol resins are routinely used as tackifying resin in chloroprene adhesives (claim 3, Table I). Thus, the skilled artisan, having read both references, would have found it obvious to use the terpenephenol resin of Esser *et al.* as the phenolic resin in the compositions of Branlard *et al.* As terpenephenol resins are known materials for adhesive compositions, the skilled artisan would have expected such an embodiment to produce a useful adhesive. The combination is obvious because both references relate to polychloroprene adhesives.

The prior art is silent with respect to the open time of the adhesive compositions therein. Since the prior art adhesive would contain essentially the same composition as that presently claimed, a reasonable basis exists to believe that such an adhesive also possesses the claimed

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open time. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

10. Claims 12, 13, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzgerald in view of U.S. Patent No. 4,141,875 to Brizzolara *et al.*

Fitzgerald does not teach use of thickening agent in the inventive adhesive compositions. Nonetheless, the use of thickening agent to modify tack in an adhesive is well established in the art. As shown in Brizzolara *et al.*, an inexpensive clay can be used as thickening agent in polychloroprene adhesives (col. 6, line 5). Thus, the skilled artisan would have found it obvious to use clay as thickening agent for polychloroprene adhesives in general, and for those disclosed in Fitzgerald. The prior art is silent with respect to the open time of the adhesive compositions therein. Since the modified adhesive would contain essentially the same composition as that presently claimed, a reasonable basis exists to believe that such an adhesive also possesses the claimed open time. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

11. Claims 14-17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome claim objections (claims 14 and 16) and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The claims are allowed over the cited prior art because the identity and amount of thickening agent(s) are not taught specifically in the references. The skilled artisan would not have found it obvious to arrive at the subject matter of the present claims based on the disclosure of the patents discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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October 27, 2003



PETER D. MULCAHY
PRIMARY EXAMINER